

## **Appendix A**

### **Summary of Data Collection and Report Methodology**



## Appendix A

# Summary of Data Collection Operations and Report Methodology

The 1999 data for the Natural Gas Annual are taken primarily from Form EIA-176, “Annual Report of Natural and Supplemental Gas Supply and Disposition” and Form EIA-895, “Monthly Quantity and Value of Natural Gas Report.” Each of these surveys and all other sources of data for this report are discussed separately in the following sections.

### Form EIA-176

#### *Survey Design*

The original version of Form EIA-176 was approved in 1980 with a mandatory response requirement. Prior to 1980, published data were based on voluntary responses to Bureau of Mines, U.S. Department of the Interior predecessor Forms BOM-6-1340-A and BOM-6-1341-A of the same title.

In 1982, the scope of the revised EIA-176 survey was expanded to collect the number of electric utility consumers in each State, volumes of gas transported to industrial and electric utility consumers, detailed information on volumes transported across State borders by the respondent for others and for the responding company, and detailed information on other disposition. These changes were incorporated to provide more complete survey information with a minimal change in respondent burden. The 1982 revision of the Form EIA-176 continues to be the basis for the current version of this form.

In 1988, the Form EIA-176 was revised to include data collection for deliveries of natural gas to commercial consumers for the account of others. The revised form was approved for use during report years 1987 through 1989. A short version of Form EIA-176 was also approved in 1988. Companies engaged in purchase and delivery activities but not in transportation and storage activities filed the short form. Usually, these companies were municipals handling small volumes of gas.

In 1990, the Form EIA-176 was revised to include more detailed information for gas withdrawn from storage facilities, gas added to storage facilities, deliveries of company-owned natural gas and natural gas transported for the account of others. The revised form was approved for use beginning with report year 1990.

Upon the Office of Management and Budget’s (OMB) approval in 1993, the Form EIA-176 was revised. All deliveries to consumers were categorized as firm or interruptible. Commercial and industrial consumers are further categorized as nonutility power producers or as without nonutility power production.

Approval of the Form EIA-176 for use through 1999 was received in 1996 from OMB. The form was modified as outlined in the “Change in Definition of Consumption Sector” below.

After being approved by the OMB in 1999, the Form EIA-176 was revised to: (1) change the filing date from April 1 following the end of the report year to March 1 following the end of the report year, (2) remove the requirement to distinguish between firm and interruptible deliveries to consumers; and (3) remove the requirement to distinguish between gas volumes delivered to commercial and industrial consumers having nonutility generation of electricity from those not generating electricity.

Data reported on this form are not considered proprietary. Response to the form continues to be mandatory.

In January 2000, forms for report year 1999 were mailed to all identified interstate natural gas pipeline companies; intrastate natural gas pipeline companies; investor and municipally owned natural gas distributors; underground natural gas storage operators; synthetic natural gas plant operators; field, well, or processing plant operators that deliver natural gas directly to consumers (including their own industrial facilities) other than for lease or plant use or processing; and field, well, or processing-plant operators that transport gas to, across, or from a State border through field or gathering facilities. Detailed instructions for completing the form were included in each survey package.

Completed forms were returned to the Natural Gas Division, Office of Oil & Gas, where each was checked for errors, corrected as necessary, and processed into computer-generated State and national data summaries.

### ***Change in Definition of Consumption Sector***

With the 1996 annual reporting cycle, the Energy Information Administration changed the customer category used for reporting deliveries to consumers in the agricultural industry from commercial to industrial. Most natural gas consumed in agriculture is used to drive irrigation systems and to dry crops. Separate reports of the volumes affected are not available so the direct impact of this change is not known.

In comparing sectoral use over time, note that:

- there is an inherent shift in natural gas volumes from the commercial to industrial sectors due simply to changes in the reporting requirements. This break in series may indicate a spurious increase in industrial consumption with a corresponding decrease in the commercial sector;
- the sum of natural gas volumes consumed by the commercial and industrial sectors will not be changed by this modification in the instructions.

### ***Response Statistics***

Each company and its parent company or subsidiaries were required to file if they met the survey specifications. The original mailing totaled 1,872 questionnaire packages. To this original mailing, 8 names were added and 18 were deleted as a result of the survey processing. Additions were the result of comparisons of the mailing list to other survey mailing lists. Deletions resulted from post office returns and determinations that companies were out of business, sold, or not within the scope of the survey. After all updates, the survey universe was 1,847 responses from approximately 1,400 companies.

Following the original mailing, second request mailing, and nonrespondents follow-up, 1,826 responses were entered into the data base. There were 21 nonrespondents.

### ***Summary of Form EIA-176 Data Reporting Requirements***

The Form EIA-176 is a five-page form consisting of seven parts. Part I of the form contains identifying information including the company identification number, the company name and address, the State for which the report is filed, and

address correction information. Part II contains certification information. The body of the form (Parts III-VII) is a multiline schedule for reporting all supplies of natural gas and supplemental gaseous fuels and their disposition within the State indicated. Respondents filed completed forms with the EIA in Washington, D.C. Data for the year 1999 were due March 1, 2000.

Computer edit programs verified the report year, State code, and arithmetic totals. Further tests were made to ensure that all necessary data elements were present and that the data were reasonable and internally consistent. The computerized edit system produced error listings with messages for each failed edit test. To resolve problems, respondents were contacted by telephone and were required to file amended forms with corrected data.

All natural gas and supplemental gaseous fuels volumes were reported on a physical custody basis in thousand cubic feet, and dollar values were reported to the nearest whole dollar. All volumes were reported at 14.73 pounds per square inch absolute pressure and 60 degrees Fahrenheit. Other minor report standards were specified in the instructions booklet to assure that the filed data were consistent and could be readily processed.

### ***Comparison of the Form EIA-176 with Other Data Sources***

Comparison of the EIA-176 data with data from similar series is another method of ensuring the validity of the data published in this report. This comparison on a company-by-company basis showed significant differences that respondents were required to reconcile.

The FPC-14, "Annual Report for Importers and Exporters of Natural Gas," was discontinued in September 1995. Data on imports and exports of natural gas, as collected by the EIA-176 survey, were checked by comparing individual responses with quarterly data reports, *Natural Gas Imports and Exports*, filed with the Office of Fossil Energy, U.S. Department of Energy. These quarterly reports are required as a condition of import/export authorizations. Where discrepancies were noted, respondents were required to file corrected reports.

Similarly, data on the underground storage of natural gas were compared with submissions of Form EIA-191, "Monthly Underground Gas Storage Report." If significant differences were noted, companies were contacted to reconcile the discrepancies. During 1999, the 116 companies filing the Form EIA-191 reported total injections of 2,614 billion cubic feet and total withdrawals of 2,791 billion cubic feet. This

compares to 2,596 billion cubic feet of injections and 2,769 billion cubic feet of withdrawals, as reported on the Form EIA-176.

Data on deliveries to residential, commercial, and industrial consumers were compared with data submitted on Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." Where discrepancies were noted, respondents were required to file corrected reports for either and sometimes both surveys. Numerous telephone calls were made to clarify any misunderstandings concerning the correct filing of both forms. Typical errors included electric utility volumes combined with industrial volumes, sale for resale volumes reported as industrial consumption, cogeneration volumes not reported on Form EIA-857, and misinterpretation of general instructions.

A discussion of the comparison of the data on deliveries to electric utilities filed on Form EIA-176 and that reported in the EIA publication, *Electric Power Annual*, is included in this Appendix under "Electric Utility Data."

### ***Routine Form EIA-176 Edit Checks***

A series of manual and computerized edit checks were used to screen the Form EIA-176. The edits performed included validity, arithmetic, and analytical checks. A computerized check was also made for consistency with previous filings.

The incoming forms for the survey were reviewed prior to keying. This prescan determined if the respondent identification (ID) number and the company name and address were correct, if the data on the form appeared complete and reasonable, and if the certifying information was complete.

Manual checks on the data were also made. Each form was prescanned to determine that data were reported on the correct lines. The flow of gas through interstate pipelines was checked at the company level to assure that each delivery from a State was matched with a corresponding receipt in an adjoining State.

## **Form EIA-627 and Form EIA-895**

### ***Survey Design***

Beginning with 1980 data, natural gas production data previously obtained on an informal basis from appropriate State agencies were collected on Form EIA-627. This form was designed by the EIA to collect annual natural gas production data from the appropriate State agencies under a standard

data reporting system within the limits imposed by the diversity of data collection systems of the various producing States. It was also designed to avoid duplication of the efforts involved in the collection of production and value data by producing States and to avoid an unnecessary respondent burden on gas and oil well operators.

In 1993, the Office of Management and Budget approved the Form EIA-627 for use in report years 1994 through 1996. In April 1999, forms for report year 1998 were mailed to the appropriate agencies in 33 States. Completed forms were returned to the Data Operations Branch of the Reserves and Natural Gas Division for review, processing, and compilation.

In 1996, the Reserves and Natural Gas Division redesigned the Form EIA-895, formerly known as the "Monthly Quantity of Natural Gas Report." The Form EIA-895, "Monthly Quantity and Value of Natural Gas Report," has a Monthly and Annual Schedule (replaces the Form EIA-627) for quantity and value of natural gas production. The Annual Schedule is to be filed with the December Monthly Schedule each year and should include any changes or updates in previously reported monthly data.

### ***Response Statistics***

Of the 33 natural gas producing States, 33 participated in the voluntary EIA-895 survey by filing the completed form or by responding to telephone contacts. Data on the quantities of nonhydrocarbon gases removed in 1999 were reported by the appropriate agencies of 11 of the 33 producing States. These 11 States accounted for 45 percent of total 1999 gross withdrawals. The State of Missouri reported zero gross withdrawals.

The commercial recovery of methane from coalbeds contribute a significant amount to the production totals in a number of States. Coalbed methane seams production quantities (in million cubic feet) are included in gross withdrawals totals for the following States: Alabama (114,657), Colorado (380,081), and New Mexico (610,062).

### ***Summary of EIA-895 Data Reporting Requirements***

The Form EIA-895 is a two-page form divided into five parts. Part I requests identifying information including the name and location of the responding State agency and the name and telephone number of a contact person within the agency. Part II collects monthly data on the production of natural gas including gross withdrawals from both gas and oil wells;



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Energy Information  
Administration

Form Approved  
OMB No. 19050175  
Expiration Date: 12/31/02  
(Revised 1999)

REPORT YEAR				
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PART I: IDENTIFICATION			
<b>Complete and return by March 1, 2000 to:</b>  <b>Energy Information Administration: EI-45</b> <b>Mail Station: 2G-024 FORSTL</b> <b>U.S. Department of Energy</b> <b>Washington, D.C. 20585</b> <b>Attn: Form EIA-176</b> <b>OR</b> <b>Fax to: (202) 586-1076 (ATTN: EIA-176)</b>  <b>Questions? Call (202) 586-6303</b>		<b>Affix mailing label or enter mailing address</b>  Control (ID) No. _____  Name: _____ Operations in (State): _____ Street or Post Office Box: _____ City, State, Zip Code: _____ Attention: _____	
1.0 Control No.	2.0 Company Name:	3.0 Report State	4.0 Revised Report Indicator
5.0 Company status, name, and/or address change or correction. (Check appropriate box.) a. <input type="checkbox"/> Name and address on mailing label are correct. b. <input type="checkbox"/> Change name, attention line, and/or mail address as indicated below. c. <input type="checkbox"/> Company was sold to, or merged with, company entered below. d. <input type="checkbox"/> Company went out of business. Customer accounts taken over by company entered below. e. <input type="checkbox"/> Other changes, corrections, or comments: _____ _____			
5.1 Change company name and/or address to: a. Company Name: _____ b. Operations in (State): _____ c. Street or Post Office Box: _____ d. City, State, Zip Code: _____ e. Attention: _____			
PART II: CONTACT INFORMATION (person most knowledgeable about the reported data)			
1.0 Contact (Please Print)		2.0 Title	
3.0 Phone Number: ( ) -	4.0 Fax Number: ( ) -	5.0 E-Mail Address:	
6.0 Signature		7.0 Date	

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**REPORT YEAR**            

<b>1.0</b> Control No.	<b>2.0</b> Company Name:	<b>3.0</b> Report State	<b>EIA</b> <div style="border: 1px solid black; width: 20px; height: 15px; margin: 2px;"></div>	<b>4.0</b> Revised Report Indicator <div style="border: 1px solid black; width: 20px; height: 15px; margin: 2px;"></div>
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**PART III: TYPE OF COMPANY AND GAS ACTIVITIES OPERATED IN THE REPORT STATE**

<b>1.0</b> Type of company (check one) a. <input type="checkbox"/> Investor owned distributor b. <input type="checkbox"/> Municipally owned distributor c. <input type="checkbox"/> <i>Interstate</i> pipeline d. <input type="checkbox"/> <i>Intrastate</i> pipeline e. <input type="checkbox"/> Storage operator f. <input type="checkbox"/> SNG plant operator g. <input type="checkbox"/> Integrated oil and gas h. <input type="checkbox"/> Producer i. <input type="checkbox"/> Gatherer j. <input type="checkbox"/> Processor k. <input type="checkbox"/> Other (specify) _____	<b>2.0</b> Gas Activities Operated Onsystem Within the Report State (check all that apply) <table style="width: 100%;"> <tr> <td style="width: 33%;">a. <input type="checkbox"/> Produced Natural Gas</td> <td style="width: 33%;">m. <input type="checkbox"/> Delivered for Resale</td> </tr> <tr> <td>b. <input type="checkbox"/> Gathered</td> <td>n. <input type="checkbox"/> Delivered directly to consumers</td> </tr> <tr> <td>c. <input type="checkbox"/> Processed</td> <td>o. <input type="checkbox"/> Other (specify) _____</td> </tr> <tr> <td>d. <input type="checkbox"/> Purchased</td> <td></td> </tr> <tr> <td>e. <input type="checkbox"/> Transported <i>Interstate</i> (between two or more states)</td> <td></td> </tr> <tr> <td>f. <input type="checkbox"/> Transported <i>Intrastate</i> (only within one state)</td> <td></td> </tr> <tr> <td>g. <input type="checkbox"/> Stored Underground</td> <td></td> </tr> <tr> <td>h. <input type="checkbox"/> Stored LNG</td> <td></td> </tr> <tr> <td>i. <input type="checkbox"/> Injected Propane-air</td> <td></td> </tr> <tr> <td>j. <input type="checkbox"/> Produced SNG</td> <td></td> </tr> <tr> <td>k. <input type="checkbox"/> Imported</td> <td></td> </tr> <tr> <td>l. <input type="checkbox"/> Exported</td> <td></td> </tr> </table>	a. <input type="checkbox"/> Produced Natural Gas	m. <input type="checkbox"/> Delivered for Resale	b. <input type="checkbox"/> Gathered	n. <input type="checkbox"/> Delivered directly to consumers	c. <input type="checkbox"/> Processed	o. <input type="checkbox"/> Other (specify) _____	d. <input type="checkbox"/> Purchased		e. <input type="checkbox"/> Transported <i>Interstate</i> (between two or more states)		f. <input type="checkbox"/> Transported <i>Intrastate</i> (only within one state)		g. <input type="checkbox"/> Stored Underground		h. <input type="checkbox"/> Stored LNG		i. <input type="checkbox"/> Injected Propane-air		j. <input type="checkbox"/> Produced SNG		k. <input type="checkbox"/> Imported		l. <input type="checkbox"/> Exported	
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j. <input type="checkbox"/> Produced SNG																									
k. <input type="checkbox"/> Imported																									
l. <input type="checkbox"/> Exported																									

**PART IV: SUPPLY OF NATURAL AND SUPPLEMENTAL GAS RECEIVED WITHIN OR TRANSPORTED INTO REPORT STATE**

Item Description	Volume (Mcf at 14.73 psia)	Estimate/ Footnote* (*see below)	Cost (including taxes)	Estimate/ Footnote* (*see below)
<b>1.0</b> Company-owned natural gas produced onsystem .....				
<b>2.0</b> Onsystem purchases received:				
<b>2.1</b> From producers, gatherers, and/or gas processors .....				
<b>2.2</b> From pipelines and/or distribution companies .....				
<b>2.3</b> From synthetic natural gas plants or SNG pipeline .....				
<b>2.4</b> At State line or U.S. border from:				
Company _____				
State or Country <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span>				
(Continue on Part VI, if more space is needed)				
<b>3.0</b> Transportation and/or exchange receipts:				
<b>3.1</b> Received within the report State .....				
<b>3.2</b> Received at the State line or U.S. border from:				
Company _____				
State or Country <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span>				
(Continue on Part VI, if more space is needed)				
<b>4.0</b> Transported into the report State from:				
State or Country <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span>				
(Continue on Part VI, if more space is needed)				
<b>5.0</b> Withdrawn from storage facilities:				
<b>5.1</b> Withdrawn from company-operated underground storage:				
<b>5.1.1</b> Company-owned natural gas .....				
<b>5.1.2</b> Natural gas owned by others .....				
<b>5.2</b> Company-owned natural gas received directly from underground storage operators .....				
<b>5.3</b> Received from underground storage operators for the account of others .....				
<b>5.4</b> From liquefied natural gas storage .....				
<b>6.0</b> Synthetic natural gas produced .....				
<b>7.0</b> Other sources of supply (specify source and/or kind of fuel): <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span>				
(Continue on Part VI, if more space is needed)				
<b>8.0</b> Total supply within report State .....				

\* Enter **E** if data reported is an estimate; enter **F** if a footnote explaining the data is included in PART VII.

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<b>1.0</b> Control No.	<b>2.0</b> Company Name:	<b>3.0</b> Report State	<b>EIA</b>	<b>4.0</b> Revised Report
				Indicator <span style="border: 1px solid black; padding: 0 5px;"> </span>

  

<b>PART V: DISPOSITION OF NATURAL AND SUPPLEMENTAL GAS RECEIVED WITHIN OR TRANSPORTED OUT OF REPORT STATE</b>				
Item Description	Volume (Mcf at 14.73 psia)	Estimate/ Footnote* (*see below)	Cost (including taxes)	Estimate/ Footnote* (*see below)
<b>1.0</b> Used in well, lease, and field operations . . . . .				
<b>2.0</b> Returned to oil and/or gas reservoirs . . . . .				
<b>3.0</b> Used, removed, or lost in gas processing or treating plants				
<b>3.1</b> Company-operated plants::				
<b>3.1.1</b> Volume delivered to company-operated plants for redelivery . . . . .	<span style="border: 1px solid black; padding: 0 20px;"> </span> Mcf			
<b>3.1.2</b> Volume used for plant fuel . . . . .				
<b>3.1.3</b> Extraction loss estimated gas phase volume of liquids extracted . . .				
<b>3.1.4</b> Volume of nonhydrocarbons removed (e.g., H <sub>2</sub> S & CO <sub>2</sub> ) . . . . .				
<b>3.1.5</b> Vented, flared, and/or lost . . . . .				
<b>3.2</b> Plants operated by others:				
<b>3.2.1</b> Volume delivered to plants operated by others for redelivery . . . . .	<span style="border: 1px solid black; padding: 0 20px;"> </span> Mcf			
<b>3.2.2</b> Total volume used, removed, vented and/or flared . . . . .				
<b>4.0</b> Added to storage facilities				
<b>4.1</b> Injected into company-operated underground storage:				
<b>4.1.1</b> Company-owned natural gas . . . . .				
<b>4.1.2</b> Natural gas owned by others . . . . .				
<b>4.2</b> Company owned gas delivered directly to underground storage operators . .				
<b>4.3</b> Delivered to underground storage operators for the account of others . . . .				
<b>4.4</b> Added to liquefied natural gas storage . . . . .				
<b>5.0</b> Deliveries of company-owned natural gas:				
<b>5.1</b> Delivered to other pipelines within the report State . . . . .				
<b>5.2</b> Delivered to resellers (e.g., distribution companies) . . . . .				
<b>5.3</b> Delivered at the State line or U.S. border to:				
Company <span style="border: 1px solid black; padding: 0 20px;"> </span>				
State or Country <span style="border: 1px solid black; padding: 0 20px;"> </span> <span style="border: 1px solid black; padding: 0 5px;"> </span> <span style="border: 1px solid black; padding: 0 5px;"> </span> <span style="border: 1px solid black; padding: 0 5px;"> </span> <span style="border: 1px solid black; padding: 0 5px;"> </span> <span style="border: 1px solid black; padding: 0 5px;"> </span> <span style="border: 1px solid black; padding: 0 5px;"> </span> <span style="border: 1px solid black; padding: 0 5px;"> </span>				
(Continue on Part VI, if more space is needed)				
<b>5.4</b> Delivered directly to consumers <span style="float: right;"><b>Number of Consumers</b></span>				
<b>5.4.1</b> Residential Sales . . . . .	<span style="border: 1px solid black; padding: 0 20px;"> </span>			
<b>5.4.2</b> Commercial Sales . . . . .	<span style="border: 1px solid black; padding: 0 20px;"> </span>			
<b>5.4.3</b> Industrial Sales . . . . .	<span style="border: 1px solid black; padding: 0 20px;"> </span>			
<b>5.4.4</b> Other Nonutility Power Producer Sales . . . . .	<span style="border: 1px solid black; padding: 0 20px;"> </span>			
<b>5.4.5</b> Electric Utility Sales . . . . .	<span style="border: 1px solid black; padding: 0 20px;"> </span>			
<b>5.4.6</b> Natural Gas Used as Vehicle Fuel . . . . .	<span style="border: 1px solid black; padding: 0 20px;"> </span>			
<b>6.0</b> Average heat content of gas delivered directly to consumers <span style="float: right;">Btu</span>	<span style="border: 1px solid black; padding: 0 20px;"> </span>			

\* Enter **E** if data reported is an estimate; enter **F** if a footnote explaining data is included in PART VII.



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**REPORT YEAR**            

<b>1.0</b> Control No.	<b>2.0</b> Company Name:	<b>3.0</b> Report State	EIA <div style="border: 1px solid black; width: 20px; height: 15px; margin: 0 auto;"></div>	<b>4.0</b> Revised Report Indicator <div style="border: 1px solid black; width: 20px; height: 15px; display: inline-block; vertical-align: middle;"></div>
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<b>PART V: DISPOSITION OF NATURAL AND SUPPLEMENTAL GAS RECEIVED WITHIN OR TRANSPORTED OUT OF REPORT STATE (continuation)</b>				
Item Description	Volume (Mcf at 14.73 psia)	Estimate/ Footnote* (*see below)	Cost (including taxes)	Estimate/ Footnote* (*see below)
<b>7.0</b> Natural gas transported for the account of others				
<b>7.1</b> Delivered to other pipelines within the report State .....				
<b>7.2</b> Delivered to resellers for the account of others .....				
<b>7.3</b> Delivered at the State line or U.S. border to:				
Company				
State or Country <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span>				
(Continue on Part VI, if more space is needed)				
<b>7.4</b> Transported and delivered to consumers for the account of others:				
<b>Number of Consumers</b>				
<b>7.4.1</b> Residential Consumers .....				
<b>7.4.2</b> Commercial Consumers .....				
<b>7.4.3</b> Industrial Consumers .....				
<b>7.4.4</b> Other Nonutility Power Producer Consumers .....				
<b>7.4.5</b> Electric Utility Consumers .....				
<b>7.4.6</b> Natural Gas Used as Vehicle Fuel .....				
<b>8.0</b> Deliveries of exchange gas or storage gas				
<b>8.1</b> Delivered at point(s) within the report State .....				
<b>8.2</b> Delivered at the State line or U.S. Border to:				
Company				
State or Country <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span>				
(Continue on Part VI, if more space is needed)				
<b>9.0</b> Used in pipeline, storage and/or distribution operations .....				
<b>10.0</b> Other disposition (specify) <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span> <span style="border: 1px solid black; padding: 0 5px;">  </span>				
(Continue on Part VI, if more space is needed)				
<b>11.0</b> Total disposition accounted for .....				
<b>12.0</b> Unaccounted for gas supply (+) or disposition (-) .....				

\* Enter **E** if data reported is an estimate; enter **F** if a footnote explaining data is included in PART VII.

**Page 4**

**EIA-176, ANNUAL REPORT OF NATURAL AND SUPPLEMENTAL GAS SUPPLY AND DISPOSITION**  
**REPORT YEAR**            

<b>1.0</b> Control No.	<b>2.0</b> Company Name:	<b>3.0</b> Report State	EIA <div style="border: 1px solid black; width: 20px; height: 20px; margin: 0 auto;"></div>	<b>4.0</b> Revised Report Indicator <div style="border: 1px solid black; width: 20px; height: 20px; display: inline-block; vertical-align: middle;"></div>
<b>PART VI: CONTINUATION SHEET (To be used only if insufficient space was provided on Part IV and/or Part V)</b>				Sheet <span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span> of <span style="border-bottom: 1px solid black; width: 20px; display: inline-block;"></span>
<b>Supply (Continued)</b>		<b>Volume</b> (Mcf at 14.73 psia)	<b>Estimate/ Footnote*</b> (*see below)	<b>Cost or Revenue (including taxes)</b>
<b>PART IV, 2.4:</b> On-system purchases received at State line or U.S. border from: (Continued) Company _____ State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
Company _____ State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<b>PART IV, 3.2:</b> Transportation and/or exchange receipts at State line or U.S. border from: (Continued) Company _____ State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
Company _____ State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<b>PART IV, 4.0:</b> Transported into the report State from: (Continued) State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<b>PART IV, 7.0:</b> Other sources of supply (specify source and/or kind of fuel): (Continued) <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<b>Disposition (Continued)</b>				
<b>PART V, 5.3:</b> Company-owned natural gas deliveries at State line or U.S. border to: (Continued) Company _____ State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
Company _____ State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<b>PART V, 7.3:</b> Transported for the account of others out of report State to: (Continued) State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<b>PART V, 8.2:</b> Deliveries of exchange gas at State line or U.S. border to: (Continued) Company _____ State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
Company _____ State or Country <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<b>PART V, 10.0:</b> Other disposition (specify): (Continued) <span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				
<span style="border-bottom: 1px solid black; display: inline-block; width: 100px;"></span>				

\* Enter **E** if data reported is an estimate; enter **F** if a footnote explaining the data is included in PART VII.

[illegible]

volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on lease; and marketed production. Part III of the form is for reporting the monthly volume and value of marketed production. Part IV of the form is for reporting the annual data, including the number of producing gas wells, the production of natural gas including gross withdrawals from both gas and oil wells; volumes returned to formation for repressuring, pressure maintenance, and cycling; quantities vented and flared; quantities of nonhydrocarbon gases removed; quantities of fuel used on lease; marketed production; value of marketed production; and quantity of marketed production (value based). Part V is space to be used by the respondent to explain data elements reported that may be based on definitions differing from those applied to data in previous years.

### ***Routine Form EIA-895 Edit Checks***

Each filing of the Form EIA-895 is manually checked for reasonableness and mathematical accuracy. Volumes are converted, as necessary, to a standard 14.73 psia pressure base. Value data are compared to the previous year's data for reasonableness. When data on nonhydrocarbon gases removed, gas vented and flared, and gas used for repressuring are not reported for a State that historically reported one or more of these items, a volume is imputed. The imputation is based on the average ratio of gas volumes in the missing category to total gross withdrawals in States with values reporting gas in that category. This average ratio is applied to the volume of total gross withdrawals reported by the State to calculate the volume for the missing items. State agencies are contacted by telephone in order to correct errors. Amended filings or resubmissions are not a requirement, since participation in the survey is voluntary.

### ***Comparison of the Form EIA-895 with Other Data Sources***

Annual production data, as reported on the Form EIA-895, are compared to the sum of monthly data previously reported on the Monthly Schedule. The comparison is made in order to assure the reasonableness of the data reported on the Form EIA-895, Annual Schedule. Any significant differences are resolved by contacting the reporting State.

For discussion of the comparison of production data collected on Form EIA-895 and that collected on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves," see the EIA report, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, Annual Reports*.

## **Electric Utility Data**

Declines in electric utility consumption and increases in industrial consumption may reflect the restructuring of the electric utility industry. As this restructuring proceeds, electricity generation plants have been sold to corporate entities that are not regulated utilities and the classification of those plants immediately changes. The volumes of gas previously reported as consumed by electric utilities are now reported delivered to "other nonutility generators." In this publication, the Energy Information Administration includes natural gas volumes consumed by these nonutility generators as part of industrial consumption.

The electric utility data published in this report are taken from the Forms EIA-759, "Monthly Power Plant Report" and FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants." These data were used in order to maintain consistency among EIA publications. Electric data are necessary on the Form EIA-176 to provide a supply/disposition balance on the form. Differences in the two surveys are apparent in the results published in Table 14, "Natural Gas Deliveries to Consumers by State," and Table 17, "Natural Gas Delivered to Electric Utilities for the Account of Others by State," where volumes in Table 17 sometimes exceed volumes in Table 14. A State-by-State comparison of the reported volumes of natural gas, as collected on the Forms EIA-176 and EIA-759 is shown in Table A1. The national totals differ by 320 billion cubic feet or 11.5 percent in relative terms.

While processing the data reported on the Form EIA-176, the EIA made special efforts to determine the reasons for the differences in reporting of electric utility data on the Forms EIA-176 and EIA-759. Typical instances of misreporting occurred in the reporting of gas delivered to electric utilities for the account of others. Some companies reported these deliveries under sales for resale. Others reported them under transportation, exchange and/or storage deliveries. A few others reported them under transported to industrials. Companies making mistakes were asked to refile, and new companies were asked to file when they were found making deliveries of gas. Most companies were cooperative, and their refilings and new filings improved the accuracy of the data.

## **Other Data Sources**

The U.S. Minerals Management Service (USMMS) supplied data on the quantity and value of natural gas production and the number of producing wells in the Gulf of Mexico Outer Continental Shelf. Volumes of extraction losses were

Figure A2. Form EIA-895



U.S. DEPARTMENT OF ENERGY  
Energy Information Administration  
Washington, D.C. 20585

Form Approval  
OMB No. 19050192  
Expiration Date: 12/31/02  
(Revised 1999)

## MONTHLY QUANTITY AND VALUE OF NATURAL GAS REPORT FORM EIA-895

This report is voluntary under Public Law 93-275. For the provisions concerning the confidentiality of information and sanctions, see Sections VI and VII of the instructions.			
<b>PART I. IDENTIFICATION DATA</b>			
1. Name of State Reporting		2. Report Period:    Month                      Year <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">2</div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;">0</div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> </div> <div style="border: 1px solid black; width: 20px; height: 20px; display: flex; align-items: center; justify-content: center;"> </div> </div>	
3. Name of Office/Agency		Complete and return forms to:  <b>Energy Information Administration, EI-45</b> <b>Mail Station: 2G-024 FORSTL</b> <b>Washington, D. C. 20585</b> <b>Attn: EIA-895</b>  OR    Fax to: (202) 586-1076  Questions?    Call (202) 586-6119	
4. Office Address (Street, City, State, Zip Code)			
<b>PART II. NATURAL GAS VOLUMES (Report All Volumes in Thousands of Cubic Feet)</b>			
Enter the pressure base at which all volumes are reported (psia at 60 degrees Fahrenheit)			
Item		Volume (Thousand cubic feet)	
Gross Withdrawals (excluding lease condensate)			
Gas and Condensate Wells			
Oil Wells (Casinghead)			
TOTAL			
Used for Repressuring			
Vented and Flared			
Nonhydrocarbon Gases Removed			
Natural Gas Used as Fuel on Leases			
Marketed Production (Excluding Lease Fuel)			
<b>PART III. QUANTITY AND VOLUME OF MARKETING PRODUCTION</b>			
Volume (thousand cubic feet)		Value (thousand dollars)	
<b>PART III. CONTACT INFORMATION (person most knowledgeable about the reported data)</b>			
5. Contact Name:		6. Title:	
7. Phone Number: (    )    -	8. Fax Number: (    )    -	9. E-Mail Address:	
10. Signature:		11. Date:	

Title 18 USC 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.

## MONTHLY QUANTITY AND VALUE OF NATURAL GAS REPORT

### FORM EIA-895

PART IV: ANNUAL SCHEDULE (to be completed when a calendar year of monthly reports has been completed)										
Enter the total number of producing gas wells in operation as of December 31 for the reporting year										
Enter the pressure base at which all volumes are reported (psia at 60° degrees Fahrenheit)										
Month	Gas and Condensate Wells	Oil Wells (Casinghead)	Total	Used for Repressuring Etc.	Vented and Flared	Non- hydrocarbon Gases Removed	Natural Gas Used as Fuel on Leases	Marketed Production	Value of Marketed Production	Quantity of Marketed Production (Value Based)
January										
February										
March										
April										
May										
June										
July										
August										
September										
October										
November										
December										
<b>Total</b>										
PART V: COMMENTS										

reported on Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." Heat (Btu) content extraction loss was estimated from data reported on Form EIA-64A and Form EIA-816, "Monthly Natural Gas Liquids Report." Volumes and prices of natural gas imports and exports were reported to the Office of Fossil Energy, U.S. Department of Energy, *Natural Gas Imports and Exports*. These data are nonproprietary and are filed annually by each individual or organization having authorization to import and export natural gas.

## Report Methodology

### **Marketed Production**

Marketed production of natural gas is taken from responses to Part IV of the Form EIA-895. It is the quantity of natural gas produced that is available for marketing and is reported in Tables 3 and 6. It refers to quantities of gas available after processes related to production are complete. These processes are repressuring, pressure maintenance, cycling, venting and flaring, removing nonhydrocarbon gases, using fuel on the lease.

Average wellhead prices are calculated from volumes and values reported in Part IV of the Form EIA-895. These data are shown as "Reported Wellhead Value" in Table 6. The volumes in this section refer to the actual amounts of natural gas reported to the States as sold.

In many States, the marketed production volumes are larger than the reported wellhead value volumes. Differences in these volumes generally result from differences in definition and reporting requirements for separate data systems in the State. For example, while production quantities of federal, tribal, and State royalty gas are included in marketed production, some State reporting rules exclude these quantities from reported wellhead value volumes.

### **Natural Gas Processed and Extraction Loss**

Extraction loss is the reduction in the volume of natural gas available for disposition resulting from the removal of natural gas liquid constituents at natural gas processing plants. It represents that portion of the "raw" gas stream that is transferred from the natural gas supply chain to the petroleum and natural gas liquids supply chain. Extraction loss does not include the reduction in volume resulting from the removal of nonhydrocarbon constituents or gas used as fuel, vented, flared, or otherwise disposed of within natural gas processing plants. Extraction loss also results in a reduction in the total heat (Btu) content of the natural gas stream equal to the heat content of the liquids extracted.

The Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production," collects data on the volume of natural gas received for processing, the total quantity of natural gas liquids produced, and the resulting shrinkage (defined as extraction loss in this report) from all natural gas processing- and cycling-plant operators. The quantity of natural gas received and liquids produced are reported by State of origin of the natural gas. Shrinkage volumes are calculated and reported by plant operators based upon the chemical composition of the liquids extracted using standard conversion factors specified in the form instructions. A description of the Form EIA-64A survey is presented in the EIA publication, *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, Annual Reports*.

The heat (Btu) content of liquids extracted is not reported on the Form EIA-64A. Therefore, in order to estimate the extraction loss heat content, data reported on the Form EIA-816, "Monthly Natural Gas Liquids Report," were used to determine the individual products contained in the total liquids reported on Form EIA-64A. A description of the Form EIA-816 survey is presented in the EIA publication, *Petroleum Supply Annual 1999*, Volume II.

To estimate the quantities of individual products extracted in each State, data from the Form EIA-64A survey were used to determine the total liquids production, and data from the Form EIA-816 survey were used to estimate the quantities of the individual products contained in those total liquids.

The Form EIA-816 captures information on the quantity of individual components (i.e., ethane, propane, normal butane, isobutane, and pentanes plus) produced or contained in mixes of plant liquids as determined by chemical analysis. The volumetric ratios of the individual components to the total liquids, as calculated from the 12 monthly Form EIA-816 reports for each State, were applied to the annual total liquids production, as reported on the Form EIA-64A, to estimate the quantities of individual components removed at gas-processing plants.

The heat (Btu) content of extracted liquids was estimated by applying conversion factors to the estimated quantities of products extracted in each State. These conversion factors, in million Btu per barrel of liquid produced, were ethane, 3.082; propane, 3.836; normal butane, 4.326; isobutane, 3.974; and pentane plus, 4.620. It should be noted that, at the State level, extraction losses are not necessarily related to State production. Gas processed in States may have originated, or been produced in other States. Some gas requires no processing.

## **Lease and Plant Fuel**

Lease and plant fuel represent those quantities of natural gas used in well, field, and/or lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and as fuel in natural gas processing plants.

Lease fuel data were collected for report year 1999, on the Form EIA-895, "Monthly Quantity and Value of Natural Gas Report." Of the 33 States reporting on the Form EIA-895, 21 States reported quantities of natural gas used as lease fuel. In the absence of reporting quantities on the Form EIA-895, the Form EIA-176 was used to estimate lease fuel quantities. Although EIA recognizes that lease data collected on the Form EIA-176 do not constitute a census or result from a statistically selected sample, the data collected in the survey provide the best information available to the EIA for estimating such usage. To estimate lease use during 1999 (Table 13), several simplifying assumptions were made:

- The quantity of gas used for lease fuel was assumed to be a function of gross withdrawals of natural gas from gas and oil wells.
- The average proportion of company-owned on-system production reported as used in lease operations by respondents to the Form EIA-176 was assumed to be typical of the average use by all operators as a proportion of gross withdrawals.
- Average usage was calculated separately for Alaska and for the lower 48 States to reflect the distinctive field operations in Alaska, particularly on the North Slope.

Form EIA-176 respondents reported volumes of company-owned onsystem production amounting to 7 percent of 1999 gross withdrawals (37 percent of gross withdrawals in Alaska and 2.3 percent of withdrawals in the lower 48 States). Lease use reported by respondents averaged 2.4 percent of reported production in Alaska and 4.7 percent of reported production in the lower 48 States. The fuel use estimates shown in Table 13 were calculated by applying the above ratios to the gross withdrawals from various States (Table 3) not reporting lease use on the EIA-895.

## **Natural Gas Consumed as a Vehicle Fuel**

Data on deliveries of natural gas delivered for use as a vehicle fuel were collected for the first time in 1990. In 1990 and 1991 deliveries of natural gas for vehicle fuel use were included with volumes delivered to commercial consumers. Beginning

with the *Natural Gas Annual 1992*, vehicle fuel volumes are no longer included with commercial volumes.

## **Coverage of Consumer Prices**

Coverage for prices varies by consumer sector as discussed below. All average prices are computed by dividing the reported revenue by its associated sales volume. Prices for deliveries of natural gas to consumers, except electric utilities, are calculated from reports to Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition." City gate prices are calculated from reports to the Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." Both of these forms are completed by companies that deliver natural gas to end-use consumers.

With the unbundling of services in the natural gas industry, pipeline and local distribution companies provide transportation service for their end-user customers. In this report, those volumes are described as deliveries of gas for the account of others. When companies that deliver gas are the sellers of that gas, they are able to report the associated revenue to the Energy Information Administration. Those volumes are described as onsystem sales. When the firm that physically delivers gas to the end user acts as a transportation agent, it does not know the sales price of the gas. Respondents, therefore, do not report a revenue amount associated with deliveries for the account of others in their submissions of the Form EIA-176.

**City gate:** City gate prices represent the total cost paid by gas distribution companies for gas received at the point where the gas is physically transferred from a pipeline company or transmission system. This price is intended to reflect all charges for the acquisition, storage, and transportation of gas as well as other charges associated with the LDC's obtaining the gas for sale to consumers.

Prices for gas delivered to the city gate represent all of the volumes of gas delivered. Since these prices are reported on a monthly form, the annual average city gate price is calculated by summing the monthly revenues reported and dividing that figure by the sum of the monthly reported volumes.

**Residential:** Prices in this publication for the residential sector cover nearly all of the volumes of gas delivered.

**Commercial and Industrial:** Prices for the commercial and industrial sectors are often associated with relatively small volumes of the total gas delivered. This occurs because they are reported by those that deliver gas and not by either the gas resellers or by the consumers. Beginning with the reporting of 1996 data, the EIA has changed the customer classification



used for reporting deliveries to consumers in the agricultural industry from commercial to industrial. This change affects the calculation of prices because these volumes and revenues previously classified as commercial are now classified as industrial. Separate reports of the volumes and revenues affected are not available so the direct impact of this change is not known.

Facilities that generate electricity but are not regulated are known as nonutility power producers. A nonutility power producer may be a commercial facility, an industrial facility, or a facility that produces electricity for resale. Deliveries of natural gas to nonutility power producers are reported on the Form EIA-176. The volumes and associated revenues for deliveries to nonutility producers who are primarily commercial establishments are included in the calculation of commercial prices. Those for deliveries to both nonutility producers who are primarily industrial establishments and nonutility establishments that produce electricity for resale are included in the calculation of industrial prices.

**Electric Utilities:** Prices for natural gas are also reported to the EIA on the Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Plants," a consumer survey form. Electric utility prices in this report are taken from this form. The respondents are all large regulated electric utilities that report consumption and prices of fuels and represent most of the volumes delivered to electric utilities. These prices are also published in the EIA report, *Cost and Quality of Fuels for Electric Utility Plants*. Prices to electric utilities, because they are derived from a survey of the utilities themselves, represent most of the volumes consumed by this sector.

**Vehicle Fuel:** Most of the natural gas delivered for vehicle fuel represents deliveries to refueling stations that are used primarily or exclusively by fleet vehicles. Thus, the prices are often those associated with the operation of fleet vehicles and may be based on internal transfer prices for companies primarily in the natural gas business.

### ***Natural Gas Balancing Item***

The natural gas balancing item represents the difference between the sum of the components of natural gas supply and the sum of the components of natural gas disposition. It is calculated for each State as the result of a comparison between total reported supply and total reported disposition (Table 2). In the formula used, total reported supply is the sum of marketed production, net interstate movements, net movements across U.S. borders, and supplemental gaseous fuels supply. Total reported disposition is the sum of extraction loss, net storage changes (net additions to storage), and

consumption. When this calculation results in a negative quantity for the balancing item it represents an excess of reported supply in relation to reported disposition, and positive quantities indicate the opposite situation.

The differences between supply and demand represent quantities lost, the net result of gas company conversions of flow data metered at varying temperature and pressure conditions to a standard temperature and pressure base, metering inaccuracies, the effect of variations in company accounting and billing practices, differences between billing cycle and calendar-period time frames, and imbalances resulting from EIA's merger of data reporting systems, which vary in scope, format, definitions, and type of respondents. The balancing items in individual States may also reflect the underreporting on Form EIA-176 of gas transported across State borders for the account of others by some interstate pipelines.

### ***Census Divisions***

The Bureau of the Census, U.S. Department of Commerce, has grouped the 50 States and the District of Columbia into Census divisions. Some of the tables and graphs in this report show data by Census division. These groupings are:

**New England:** Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

**Middle Atlantic:** New Jersey, New York, and Pennsylvania.

**East North Central:** Illinois, Indiana, Michigan, Ohio, and Wisconsin.

**West North Central:** Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota.

**South Atlantic:** Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia.

**East South Central:** Alabama, Kentucky, Mississippi, and Tennessee.

**West South Central:** Arkansas, Louisiana, Oklahoma, and Texas.

**Mountain:** Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming.

**Pacific Contiguous:** California, Oregon, and Washington.

**Pacific Noncontiguous:** Alaska and Hawaii

**Table A1. Comparison of Electric Utility Natural Gas Consumption Data by State, 1999**  
(Million Cubic Feet)

State	Form EIA-176	Form EIA-759	Difference	MDP <sup>a</sup>
Alabama.....	17,039	20,918	3,879	22.8
Alaska.....	29,720	30,529	810	2.7
Arizona.....	51,577	50,875	-702	1.4
Arkansas.....	38,197	40,088	1,891	5.0
California.....	141,730	144,655	2,924	2.1
Colorado.....	20,048	19,155	-893	4.7
Connecticut.....	13,704	13,095	-609	4.7
Delaware.....	19,587	19,878	292	1.5
Florida.....	330,659	319,274	-11,385	3.6
Georgia.....	23,713	20,537	-3,175	15.5
Illinois.....	47,334	40,716	-6,619	16.3
Indiana.....	11,459	7,655	-3,803	49.7
Iowa.....	9,509	5,249	-4,261	81.2
Kansas.....	25,696	35,889	10,193	39.7
Kentucky.....	1,138	5,590	4,453	391.4
Louisiana.....	253,735	320,328	66,593	26.2
Maryland.....	18,224	16,399	-1,824	11.1
Massachusetts.....	8,426	8,141	-285	3.5
Michigan.....	49,920	51,122	1,203	2.4
Minnesota.....	4,557	6,595	2,038	44.7
Mississippi.....	111,273	101,623	-9,650	9.5
Missouri.....	14,142	19,427	5,285	37.4
Montana.....	326	289	-38	13.0
Nebraska.....	1,890	4,555	2,665	141.0
Nevada.....	66,750	65,105	-1,645	2.5
New Hampshire.....	0	572	572	0
New Jersey.....	31,396	32,650	1,254	4.0
New Mexico.....	36,538	35,581	-957	2.7
New York.....	171,661	181,823	10,162	5.9
North Carolina.....	10,347	10,584	237	2.3
North Dakota.....	4	0	-4	0
Ohio.....	9,251	11,105	1,854	20.0
Oklahoma.....	131,742	169,845	38,103	28.9
Oregon.....	19,558	23,292	3,733	19.1
Pennsylvania.....	10,729	10,376	-353	3.4
South Carolina.....	4,953	5,118	165	3.3
South Dakota.....	160	2,527	2,368	—
Tennessee.....	6,884	3,460	-3,424	98.9
Texas.....	952,244	1,207,293	255,049	26.8
Utah.....	6,513	6,478	-35	0.5
Vermont.....	276	250	-27	10.7
Virginia.....	71,776	23,457	-48,318	206.0
Washington.....	3,598	6,693	3,095	86.0
West Virginia.....	195	385	190	97.7
Wisconsin.....	15,312	14,077	-1,235	8.8
Wyoming.....	0	167	167	0
<b>Total.....</b>	<b>2,793,489</b>	<b>3,113,419</b>	<b>319,930</b>	<b>11.5</b>

<sup>a</sup> Relative comparisons are expressed as the maximum difference percentage (MDP), or the absolute value of the difference between two volumes divided by the smaller of the two volumes, multiplied by 100.

— = Not applicable.

**Note:** Totals may not equal sum of components due to independent rounding.

**Sources:** Energy Information Administration (EIA), Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition" and Form EIA-759, "Monthly Power Plant Report."

**Table A2. Natural Gas Unaccounted for by State, 1995-1999**  
(Million Cubic Feet)

State	1995	1996	1997	1998	1999
Alabama .....	9,997	-2,954	15,799	32,788	3,021
Alaska .....	-592	1,032	-1,790	3,923	-1,993
Arizona .....	2,606	1,191	2,975	-40,211	23,178
Arkansas .....	8,881	7,639	7,569	3,985	4,301
California .....	174,506	277,924	292,339	61,625	-9,344
Colorado .....	8,734	6,652	9,110	11,664	15,001
Connecticut .....	3,826	1,055	334	2,187	1,948
D.C. ....	1,006	784	1,074	794	1,398
Delaware .....	2,065	438	5,935	4,808	-1,254
Florida .....	3,554	-4	4,391	3,105	8,645
Georgia .....	3,712	1,666	-1,260	9,828	-49,244
Hawaii .....	21	88	6	61	17
Idaho .....	8,893	-18,969	-61,021	-19,015	-11,107
Illinois .....	30,648	10,867	15,349	14,312	8,777
Indiana .....	539	-3,307	11,848	10,081	6,268
Iowa .....	4,849	4,500	5,370	34,578	17,180
Kansas .....	14,287	7,904	25,939	22,666	11,636
Kentucky .....	9,808	9,410	8,345	409	2,041
Louisiana .....	10,248	19,555	40,760	82,184	-15,447
Maine .....	292	241	231	78	570
Maryland .....	9,879	5,592	12,147	6,588	9,570
Massachusetts .....	1,091	-5,692	1,359	4,702	11,798
Michigan .....	4,028	16,836	42,875	2,685	32,940
Minnesota .....	-32,466	6,703	4,855	825	3,643
Mississippi .....	21,441	13,047	18,066	-122,470	18,000
Missouri .....	13,981	1,596	5,779	7,267	9,669
Montana .....	-5,345	-6,233	-6,635	2,146	-1,613
Nebraska .....	2,403	4,354	1,531	1,630	-281
Nevada .....	533	1,479	2,795	623	-1,947
New Hampshire .....	453	466	1,046	149	540
New Jersey .....	1,790	-741	3,500	-16,615	-22,294
New Mexico .....	9,924	6,859	2,010	-2,065	-13,432
New York .....	18,129	940	126,641	115,611	42,660
North Carolina .....	7,640	1,300	8,125	-274	27,932
North Dakota .....	-66	1,259	1,041	7,590	-137
Ohio .....	31,518	16,344	-67,821	6,586	32,614
Oklahoma .....	13,742	302	-32,983	29,312	-14,856
Oregon .....	5,406	1,560	1,603	3,116	390
Pennsylvania .....	18,220	-4,426	12,631	6,187	-7,268
Rhode Island .....	2,362	-646	-2,652	-3,400	-2,901
South Carolina .....	2,315	846	2,807	138	1,049
South Dakota .....	1,107	994	500	1,227	-339
Tennessee .....	8,123	11,613	8,426	1,630	6,955
Texas .....	-6,590	51,729	10,262	-73,153	40,909
Utah .....	5,669	15,207	35,469	3,895	7,090
Vermont .....	802	1,817	4,690	777	-915
Virginia .....	8,328	4,810	7,057	5,521	7,789
Washington .....	66,580	68,447	59,159	1,772	-1,662
West Virginia .....	8,561	5,044	64,475	11,554	6,709
Wisconsin .....	5,402	-2,756	7,001	7,791	4,770
Wyoming .....	-1,784	3,911	5,349	7,961	5,498
<b>Total .....</b>	<b>521,057</b>	<b>548,274</b>	<b>724,409</b>	<b>259,157</b>	<b>218,475</b>

**Source:** Energy Information Administration (EIA), Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

